

Claims

- 1 1. A sensor apparatus comprising;
2 a housing including a cavity;
3 a first end cap on one end of the housing;
4 a second end cap on an opposite end of the housing;
5 a sensor module coupled to the first end cap and supported within the
6 housing cavity, including a plurality of sensor packages, each
7 sensor package having an axis of sensitivity positioned in a
8 different spatial direction;
9 a plurality of first sealing members for sealing the interface between the
10 first end cap and the housing;
11 a plurality of second sealing members for sealing the interface between
12 the second end cap and the housing;
13 a plurality of first coupling members for coupling the first end cap to the
14 housing; and
15 a plurality of second coupling members for coupling the second end cap to
16 the housing.
- 1 2. A sensor package comprising;
2 a package; and
3 a sensor coupled to the package.
- 1 3. A sensor assembly package, comprising;
2 a plurality of sensor packages, each sensor package having an axis of
3 sensitivity; and
4 wherein each sensor package is positioned with its axis of sensitivity in a
5 different spatial direction.
- 1 4. A method of coupling a controller onto a package, comprising; dispensing
2 an adhesive on the package;
3 placing the controller onto the adhesive;

- 1 curing the adhesive;
 - 2 wire-bonding the controller to the package; and
 - 3 encapsulating the controller and the wire bonds.
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- 1 5. A method of assembling a sensor package including a package and a
 - 2 sensor, comprising coupling the sensor to the package.
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- 1 6. A method of assembling a multi-axis sensor assembly, comprising:
 - 2 a plurality of sensor packages, each sensor package having an axis of
 - 3 sensitivity; and
 - 4 positioning each sensor package with its axis of sensitivity in a different
 - 5 spatial direction.
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- 1 7. A sensor module package comprising;
 - 2 one or more substrates including one or more slots; and
 - 3 one or more sensors positioned within the slots.
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- 1 8. A method of assembling a sensor package comprising one or more
 - 2 substrates and one or more sensors, comprising coupling the sensor to
 - 3 the substrates.

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